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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,222	04/01/2002	Norbert Kohler	612.41024X00	9212

20457 7590 06/27/2003

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EXAMINER

RHEE, JANE J

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,222

Applicant(s)

KOHLER ET AL.

Examiner

Jane J Rhee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I in Paper No. 8 is acknowledged. The traversal is on the ground(s) that Group I and III lack the corresponding technical features. This is not found persuasive because Group I pertains to an enclosure filled with vegetable foam particles, Group II pertains to the composition of vegetable foam and not vegetable foam particles, and Group III does not consist of the special technical feature of non-gelatinized starch that Group II has.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims a method, however no method steps are listed and instead an article is claimed.

3. The term "N soda" in claim 3 is a relative term which renders the claim indefinite. The term "N soda" is not defined by the claim, the specification does not provide a

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standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckel et al. in view of Boehmer et al. (5272181).

Heckel et al. discloses a pipe jacket comprising a volume defined by the space contained between a first enclosure interior to a second enclosure is filled with foam particles. Heckel et al. discloses that the volume is an annular spaced defined by the outside of a pipe placed in another pipe. Heckel et al. fail to disclose that between a first enclosure and a second enclosure the space is filled with vegetable foam particles. Heckel et al. fail to disclose that the vegetable foam is solubilized by an aqueous fluid. Heckel et al. fail to disclose that the fluid is about 1N soda and that the average particle size is below 5mm. Heckel et al. fail to disclose that the vegetable foam comprises at least flour, plasticizer, another additive, a water content below 10% and preferable below 5%. Heckel et al. fail to disclose that the vegetable foam have the following properties, thermal conductivity ranging between 0.03 and 0.06W/mK and at least partial solubility in an aqueous fluid. Heckel et al. fail to disclose that the space further

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comprises at least one of the following insulants, silicate foam particles, aerogel foam particles, or dry powders.

Boehmer et al. teaches expanded vegetable foam material is solublized by an aqueous fluid (col. 2 lines 45-50) for the purpose of being able to be placed on the subsurface layer of a landfill or to be disposed in a wastewater treatment system having facilities for biological or other types of degradative treatment (col. 2 lines 50-55).

Boehmer et al. teaches that the vegetable foam comprises at least flour (col. 3 lines 50-52), plasticizer (col. 4 line 14), another additive (col. 3 lines 13-15), a water content below 10% and preferable below 5% (col. 3 lines 6-10) for the purpose of providing a biodegradeable foam composition (col. 2 lines 38-39). Boehmer et al. teaches that the average particle size is below 5mm (col. 6 line 23) for the purpose of preparing loose packing materials (col. 6 line 14). Boehmer et al. teaches that the space further comprises silicate foam particles (col. 4 line 46) for the purpose of initiating the development of air cells and control the cell size (col. 4 lines 43-44).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Heckel et al. with expanded vegetable foam material that is solublized by an aqueous fluid in order to be able to be placed on the subsurface layer of a landfill or to be disposed in a wastewater treatment system having facilities for biological or other types of degradative treatment (col. 2 lines 50-55) as taught by Boehmer et al.

Also, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Heckel et al. with that the vegetable foam

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comprises at least flour, plasticizer, another additive, a water content below 10% and preferable below 5% in order to provide a biodegradeable foam composition (col. 2 lines 38-39) as taught by Boehmer et al.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Heckel et al. with the average particle size that is below 5mm in order to prepare loose packing materials (col. 6 line 14) as taught by Boehmer et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Heckel et al. with the space that further comprises silicate foam particles in order to initiate the development of air cells and control the cell size (col. 4 lines 43-44) as taught by Boehmer et al.

Boehmer et al. discloses that vegetable foam comprises at least flour (col. 3 lines 50-52), plasticizer (col. 4 line 14), another additive (col. 3 lines 13-15), a water content below 10% (col. 3 lines 6-10) as desired by the applicant, therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide that the aqueous fluid that the vegetable foam is solubized by is about 1N soda and that the vegetable foam have a thermal conductivity ranging between 0.03 and 0.06W/mK, since it has been held that discovering optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d.

Conclusion

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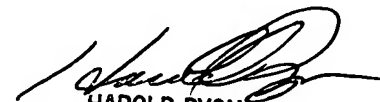
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 703-605-4959. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Jane Rhee
June 24, 2003



HAROLD PYON
SUPERVISORY PATENT EXAMINER

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6/24/03